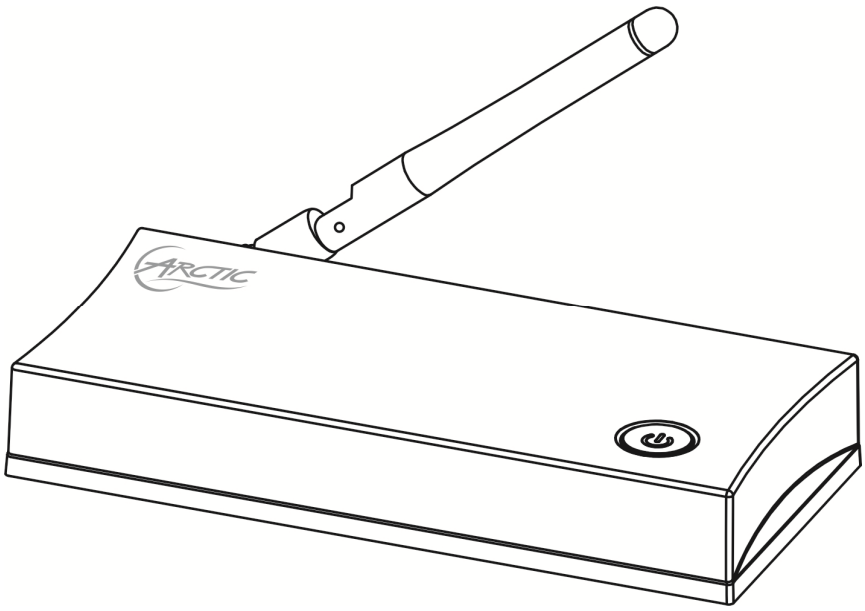
Audio Relay

User Manual

For further information, please consult audiorelay.arctic.ac



V1.1

10/2012

Table of Contents

Chapter 1 Introduction

1.1 Package Contents……..…...3
1.2 Connection Ports……..……..3
1.3 System Requirements……4
1.4 Remote Control App……...……4
1.4.1 Where to download
1.4.2 Tutorial and troubleshooting
1.5 Warranty……...4

Chapter 2 Setup Guide

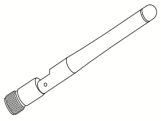
2.1 Setup your Audio Relay ……5
2.1 A …through an Ethernet (Cable) connection
2.1 B …through WPS and a Wi-Fi connection
2.1 C …through WCN (Windows Connect Now)
2.2 Configure your Audio Relay.....10
2.3 Connect to your Hi-Fi System……..……..……12

Chapter 3 Streaming Music

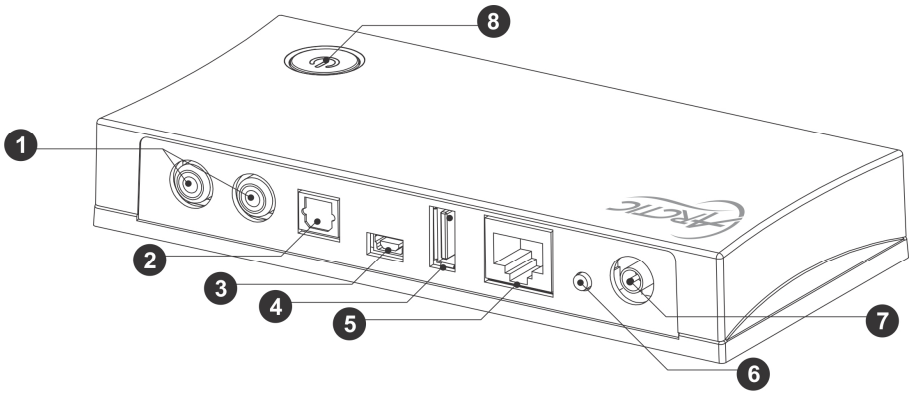
3.1 Getting Ready ……...……13
3.1.1 Enable media streaming
3.1.2 Add music to the Windows Media Player library
3.2 Stream Your Music.....……..17
3.2 A Stream and control your music from your phone
3.2 B Stream and control your music from your PC
3.2 C Stream music from your PC and use your phone as remote control

Chapter 4 Frequently Asked Questions……..…..21

1.1 Package Contents

Audio Relay	USB Power Adapter	Mini USB Cable
Stereo RCA Cable	Wi-Fi Antenna 	Quick Start Guide

1.2 Connection Ports



1	Stereo RCA Out
2	Optical Out
3	Mini USB Port (power use only)
4	USB 2.0 Host
5	RJ45 Ethernet Port
6	WPS Button
7	Wi-Fi Antenna
8	Power Switch

1.3 System Requirements

To ensure Audio Relay to function properly, you are required to have all of the following:

- ✓ a Windows 7 PC, or any other OS/NAS with UPnP or DLNA server* and a music library;
- ✓ a Hi-Fi system with stereo RCA input or optical SPDIF;
- ✓ a network with Ethernet at100Mbit/s or Wi-Fi 802.11g.

Below are optional:

- ✓ LAN cable (for connecting your Audio Relay to an Ethernet);
- ✓ USB flash drive (for using Windows Connect Now (WCN) to connect to the wireless network);
- ✓ Router (when operating under the wireless mode)

* Examples of DPnP or DLNA server include Twonkyserver, TVersity and Mediatomb.

1.4 Remote Control App

Remote AR is a free remote control app for Audio Relay to stream digital music tracks from your PC or DLNA/UPnP server to your Hi-Fi system on the shelf using the phone/tablet PC. You may browse and edit your music playlists on your phone/tablet and listen to it in different rooms. Besides, you may download your preferred streaming app which is compatible with Audio Relay.

1.4.1 Where to download

Remote AR

- Google Play (https://play.google.com/store/apps/details?id=com.arctic.remote.ar)
- App Store (http://itunes.apple.com/us/app/remote-ar/id501006700?mt=8)

Compatible streaming apps (recommended)

- BubbleUPnP (Android) (https://play.google.com/store/apps/details?id=com.bubblesoft.android.bubbleupnp)
- 2Player (Android) (https://play.google.com/store/apps/details?id=com.twoplay.twoplayer)
- Skifta (Android) (https://play.google.com/store/apps/details?id=com.skifta.android.app&hl=en_GB)
- PlugPlayer (iOS) (https://itunes.apple.com/us/app/plugplayer/id411195253?mt=12)

1.4.2 Tutorial and Troubleshooting

Online support is available at http://www.remoteAR.arctic.ac.

1.5 Warranty

This ARCTIC product includes a two-year limited warranty. For further information, please visit www.warranty.arctic.ac.

Restore factory settings: press and hold the power button for at least 15 seconds to restore the original factory settings of your Audio Relay.

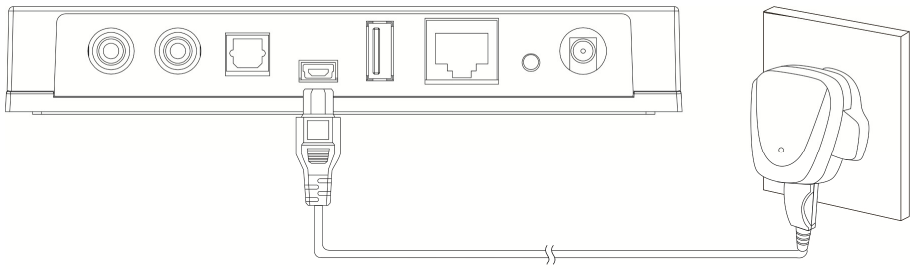
2.1 Setup your Audio Relay

There are 3 ways to setup the Audio Relay, explained in the following paragraphs (2.1 A to 2.1 C). Choose the method according to your preference and follow **2.1 A, 2.1 B** or **2.1 C** to connect the Audio Relay to your network.

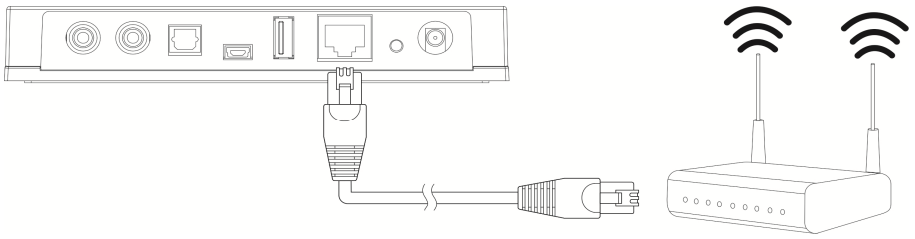
1. Through an Ethernet/Cable connection --- please refer to 2.1 A OR;
2. Through WPS and a Wi-Fi connection --- please refer to 2.1 B OR;
3. Through WCN (Windows Connect Now) --- please refer to 2.1 C.

2.1 A Setup the Audio Relay through an Ethernet (Cable) connection

a. Connect the Audio Relay to the power source with the provided USB cable. Alternatively the Audio Relay can be powered by any USB port providing 600mA output.



b. Connect the Audio Relay to your router by an Ethernet/LAN cable.

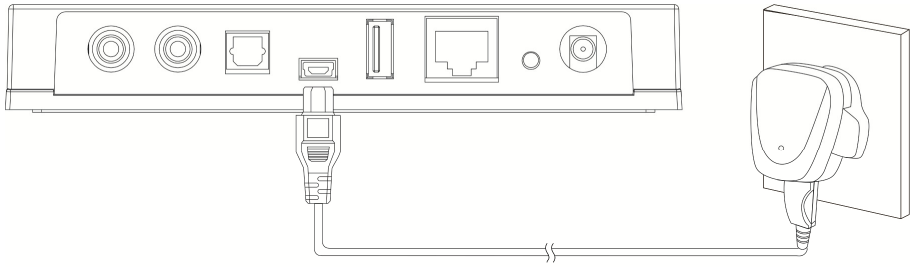


Please continue with Section 2.2 on P.10

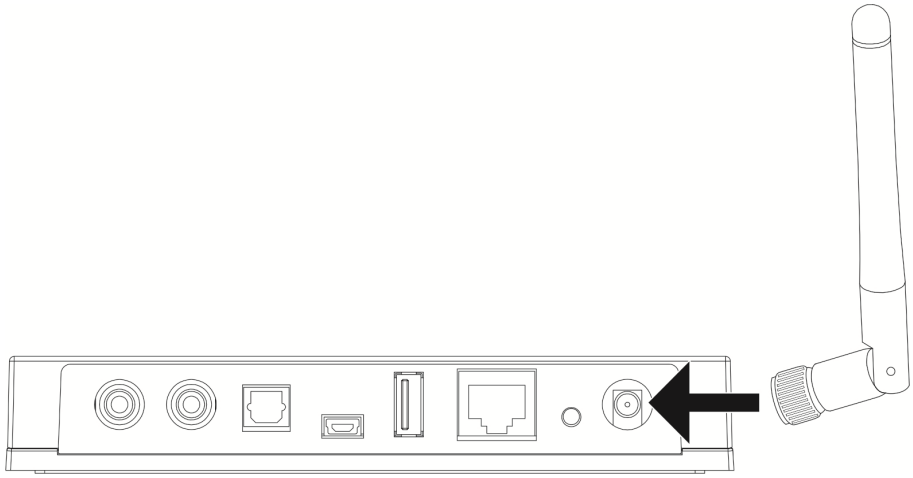
2.1 B Setup of the Audio Relay through WPS and a Wi-Fi connection

NOTE: In order to connect through WPS, your router has to support this function. If you have followed the setup under 2.1 A, please continue with 2.2.

a. Connect the Audio Relay to the power source with the provided USB cable. Alternatively the Audio Relay can be powered by any USB port providing 600mA output.



b. Install the included Wi-Fi antenna.



c. Turn on the Audio Relay.

d. After one minute, press the power button for 5 to 10 seconds in order to switch the connection from Ethernet (by default) to wireless mode.

NOTE: The Audio Relay will then automatically reboot (~ 30 seconds). You can restore all original factory settings by pressing the power for 15 seconds.

e. Press the WPS button on the router and hold it for three seconds.

f. Press the WPS button at the back of the Audio Relay for three seconds.
Your Wi-Fi connection will then be established.

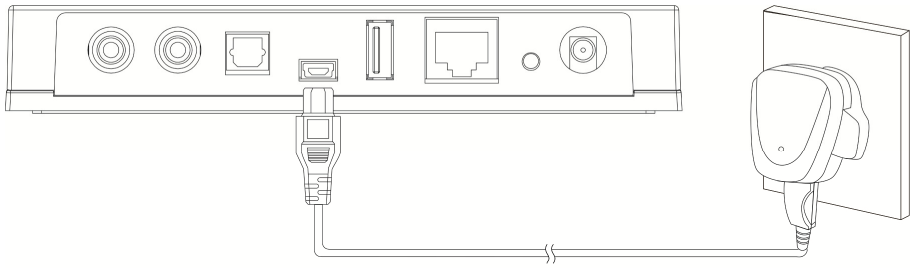
NOTE: Some routers may use a flashing light to indicate that a connection is in progress until the connection has been successfully established.

Please continue with Section 2.2 on P.10

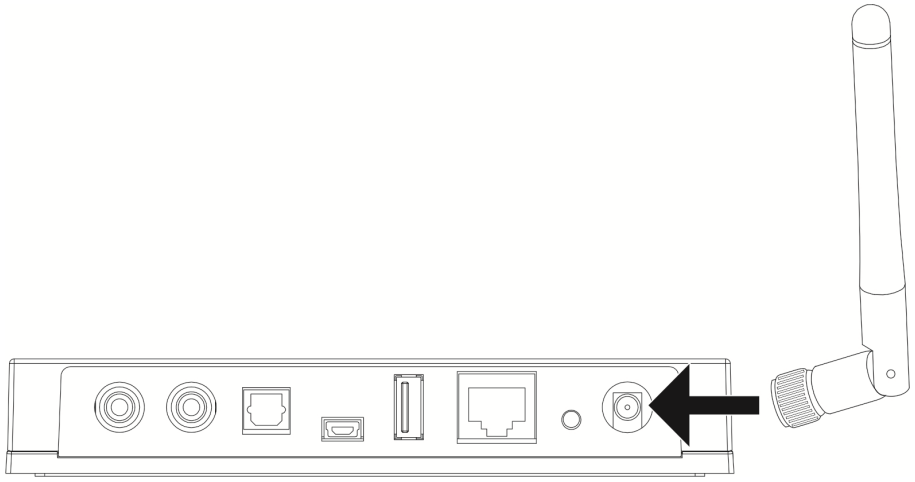
2.1 C Setup of the Audio Relay through WCN (Windows Connect Now)

NOTE: This function only works under Windows XP SP2 or later.

a. Connect the Audio Relay to the power source with the provided USB cable. Alternatively the Audio Relay can be powered by any USB port providing 600mA output.



b. Install the included Wi-Fi antenna.



c. Turn on the Audio Relay.

d. After one minute, press the power button for 5 to 10 seconds in order to switch the connection from Ethernet (by default) to wireless mode.
NOTE: The Audio Relay will then automatically reboot (~ 30 seconds). You can restore all original factory settings by pressing the power for 15 seconds.

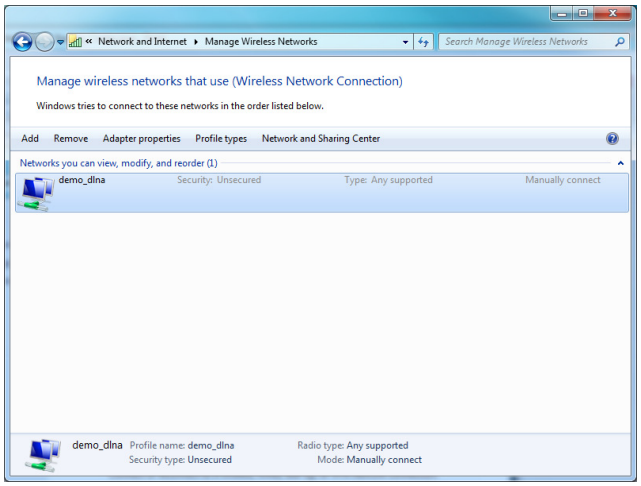
e. Set up your router to operate in an open (unsecured) network without any wireless security (no encryption, no MAC filters). For further details, please consult the manual of your router.

f. In Windows go to Start Menu > Control Panel > Network and Internet.

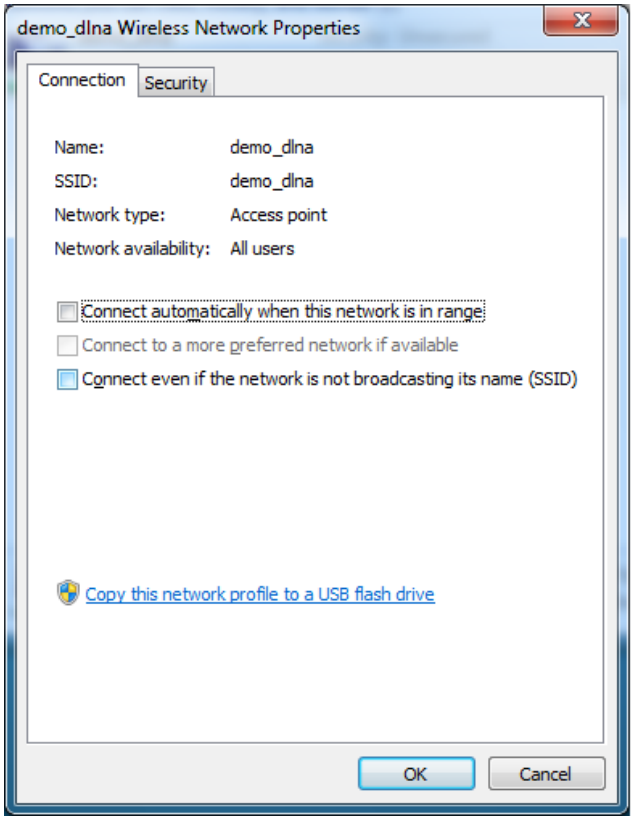
g. Select “Network and Sharing Center”.

h. Click on “Manage Wireless Networks” on the left.

i. Connect to your wireless network by right clicking on the appropriate wireless network or click “Add” if your wireless network is not already listed.



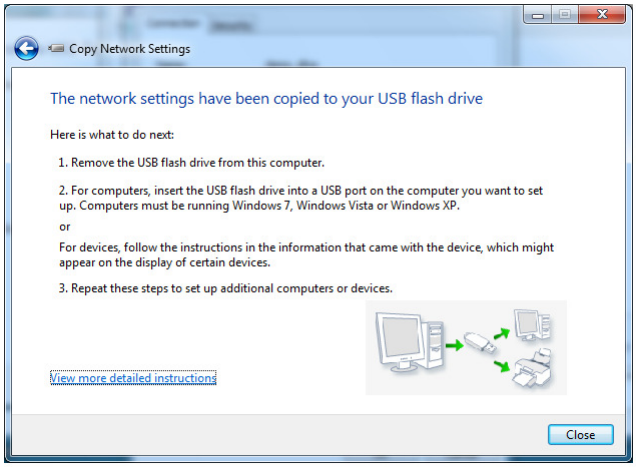
j. Click on the “Copy this network profile to a USB flash drive” link at the bottom of the menu.


demo_dlna Wireless Network Properties
Connection
Security
Name: demo_dlna
SSID: demo_dlna
Network type: Access point
Network availability: All users
Connect automatically when this network is in range
Connect to a more preferred network if available
Connect even if the network is not broadcasting its name (SSID)
Copy this network profile to a USB flash drive
OK
Cancel

k. Insert a USB flash drive into your computer’s USB port to copy your wireless configuration.

l. Click “Next” to continue.

Copy Network Settings
Insert a USB flash drive into this computer
Windows will copy the network settings for demo_dlna to your USB drive.
Click Next to copy the network settings to UDISK (E:).
Next
Cancel


Copy Network Settings
The network settings have been copied to your USB flash drive
Here is what to do next:
1. Remove the USB flash drive from this computer.
2. For computers, insert the USB flash drive into a USB port on the computer you want to set up. Computers must be running Windows 7, Windows Vista or Windows XP.
or
For devices, follow the instructions in the information that came with the device, which might appear on the display of certain devices.
3. Repeat these steps to set up additional computers or devices.
View more detailed instructions
Close

m. Switch off the Audio Relay and insert this USB flash drive into the Audio Relay.

n. Switch on Audio Relay and open Windows Explorer to see if the Audio Relay is listed as one of the available media devices under the Network section

o. Remove the USB flash drive

NOTE: WCN is a function available in Windows XP SP2 or later version. Please also note that the Audio Relay deletes the wireless configuration from the USB flash drive after successful connection.

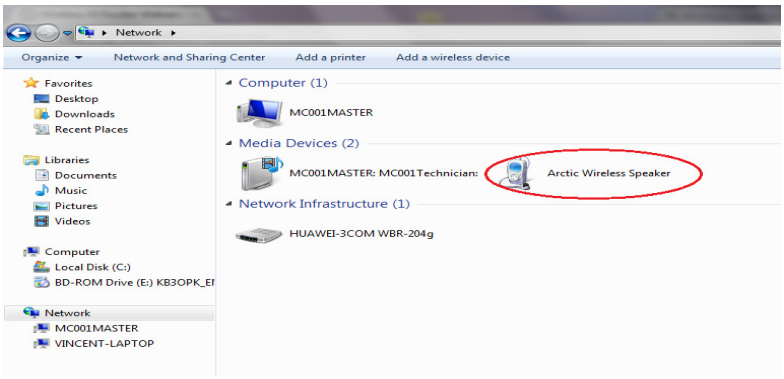
NOTE: Before you activate a Wi-Fi encryption on your router again, go through the configuration of the Audio Relay (Section 2.2 of this manual) and add the encryption on the Audio Relay first.

Please continue with Section 2.2 on P.10

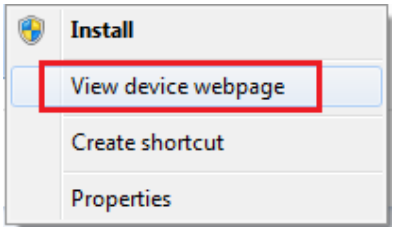
2.2 Configure your Audio Relay

a. Access the web user interface (WUI)

Open Windows Explorer



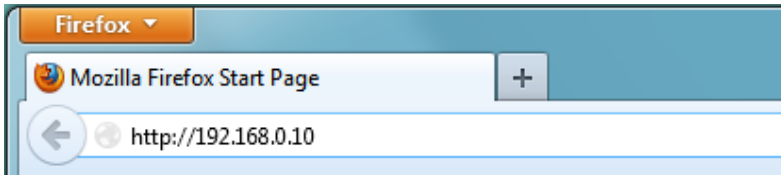
Right click the “Arctic Wireless Speaker” icon after selecting the “Network” tab on the left



Select “View device webpage” to enter the WUI.

NOTE: The above steps apply to **Windows Vista** and **Windows 7**.

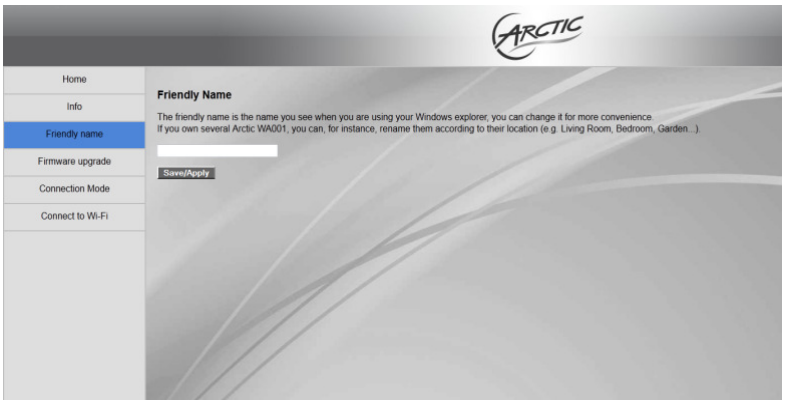
For **Windows XP, Mac or Linux OS**, multimedia devices are not displayed in the File Explorer. In order to access the WUI, you will need to input the IP address of your Audio Relay onto a web browser. You can obtain this IP address from the DHCP clients table of your router. Please consult the router manual how to access the DHCP clients table.



b. Select your preferred language by clicking on one of the listed country flags located on the “Home” tab.

c. Select the “Friendly Name” tab.

If you have more than one Audio Relay, you may decide to rename each of them according to their locations (e.g., Living Room, Bedroom, Room A).


Home
Info
Friendly name
Firmware upgrade
Connection Mode
Connect to Wi-Fi
Friendly Name
The friendly name is the name you see when you are using your Windows explorer, you can change it for more convenience.
If you own several Arctic WA001, you can, for instance, rename them according to their location (e.g. Living Room, Bedroom, Garden...).
Save/Apply

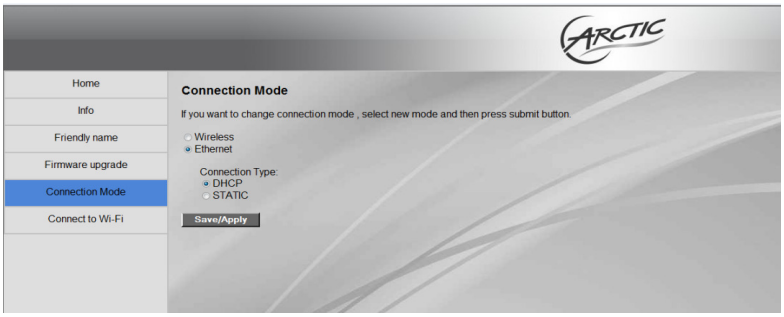
If you use an Ethernet connection (Step 2.1 A) to configure your Audio Relay, continue with d) and e), otherwise move on to Section 2.3.

d. Select the “Connection Mode” tab. In this menu you will choose how you like to connect the Audio Relay to your network after this setup process: through Wi-Fi or Ethernet/Cable

Click on the desired connection mode (Wireless or Ethernet).

Click on the “Save/Apply” button.

NOTE: The Audio Relay will automatically reboot (~ 30 seconds) after you click on the “Save/Apply” button in order to save the changes you have made.



e. If you chose wireless, click on the “Connect to Wi-Fi” tab, select your Wi-Fi network, input your Wi-Fi password and click on “Connect”.

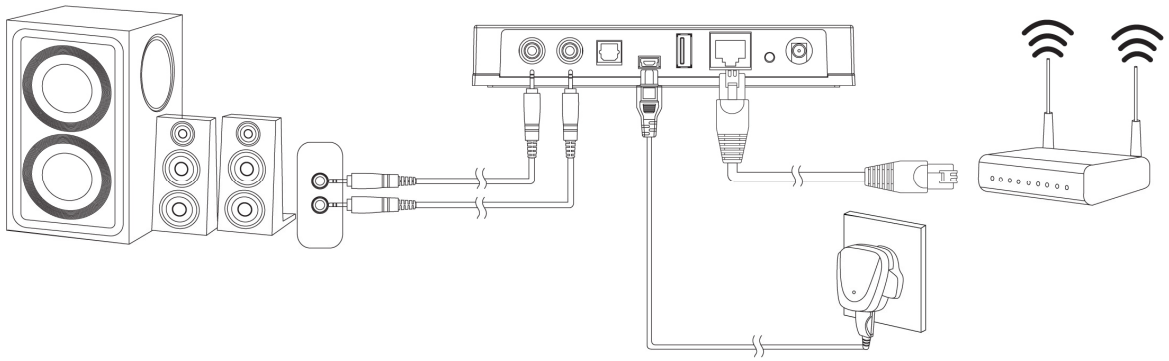
Congratulations! You have successfully set up your Audio Relay. Please continue with Section 2.3

2.3 Connect to your Hi-Fi system

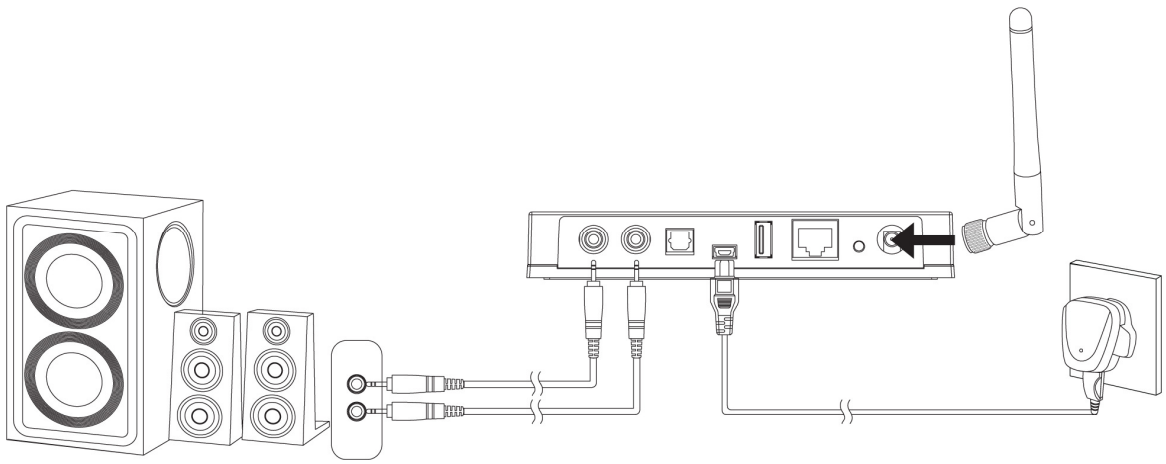
Bring your Audio Relay to where you want to have music (e.g. living room or bedroom).

Connect the Audio Relay through the stereo RCA or an optical cable to your Hi-Fi system or active speakers.

Example:



OR



3.1 Getting Ready

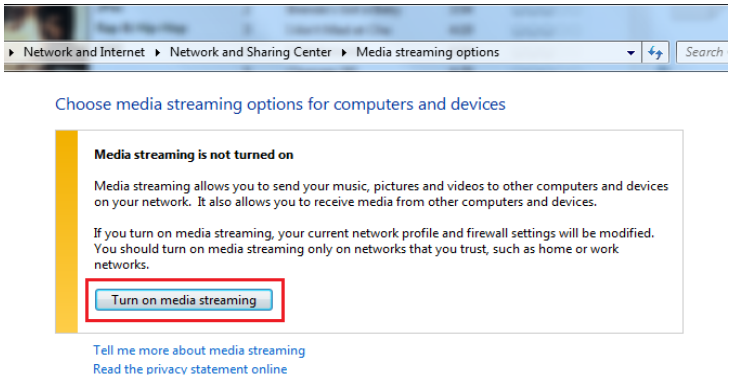
3.1.1 Enable Media Streaming

In order to stream music from your PC, you need to have Windows Media Player 12 or later and enable media streaming. If you are not using Windows 7 OS, please refer to the instructions of your UPnP/DLNA server to activate media streaming functionality.

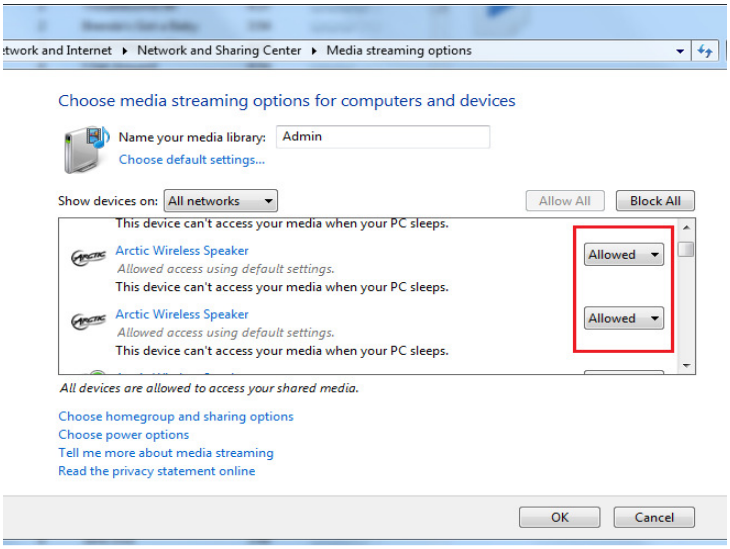
Start Windows Media Player and click “Stream > Turn on media streaming …”.

NOTE: The option “Turn on home media streaming” is not available on the stream menu if the streaming has already been enabled.

Then you need to click on the “Turn on media streaming” button.


Network and Internet ▸ Network and Sharing Center ▸ Media streaming options
Choose media streaming options for computers and devices
Media streaming is not turned on
Media streaming allows you to send your music, pictures and videos to other computers and devices on your network. It also allows you to receive media from other computers and devices.
If you turn on media streaming, your current network profile and firewall settings will be modified. You should turn on media streaming only on networks that you trust, such as home or work networks.
Turn on media streaming
Tell me more about media streaming
Read the privacy statement online

Scroll down the list showing the devices on your network and customize the stream settings.

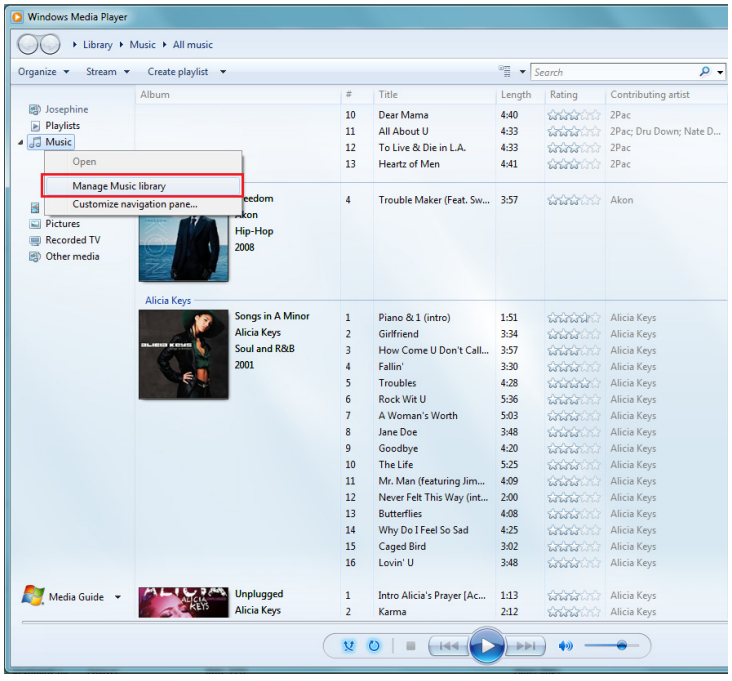

Network and Sharing Center ▸ Media streaming options
Choose media streaming options for computers and devices
Name your media library: Admin
Choose default settings...
Show devices on: All networks
Allow All
Block All
This device can't access your media when your PC sleeps.
Arctic Wireless Speaker
Allowed access using default settings.
This device can't access your media when your PC sleeps.
Allowed
Arctic Wireless Speaker
Allowed access using default settings.
This device can't access your media when your PC sleeps.
Allowed
All devices are allowed to access your shared media.
Choose homegroup and sharing options
Choose power options
Tell me more about media streaming
Read the privacy statement online
OK
Cancel

Click “OK” to finish.

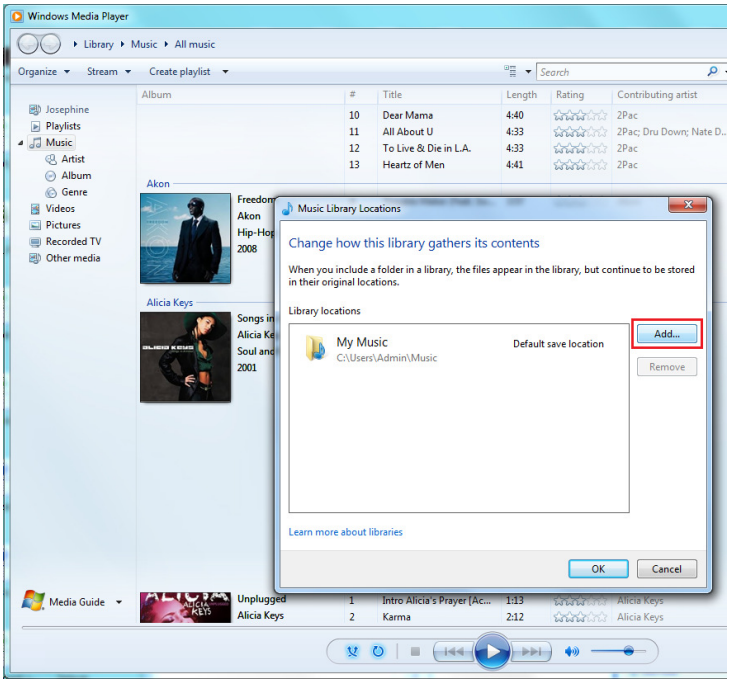
3.1.2 Add music to the Windows Media Player library

You need to add music to the Windows Media Player library for streaming later on.

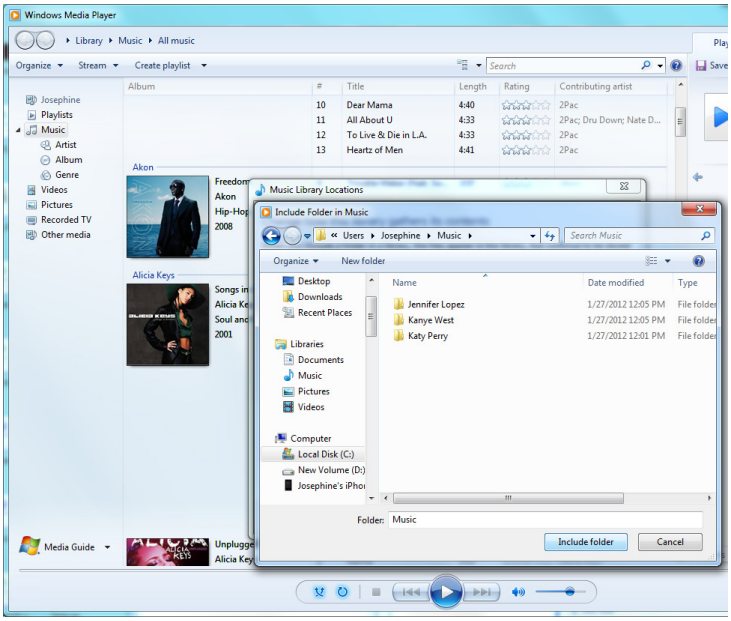
Start Windows Media Player and right click Music > Manage Music library



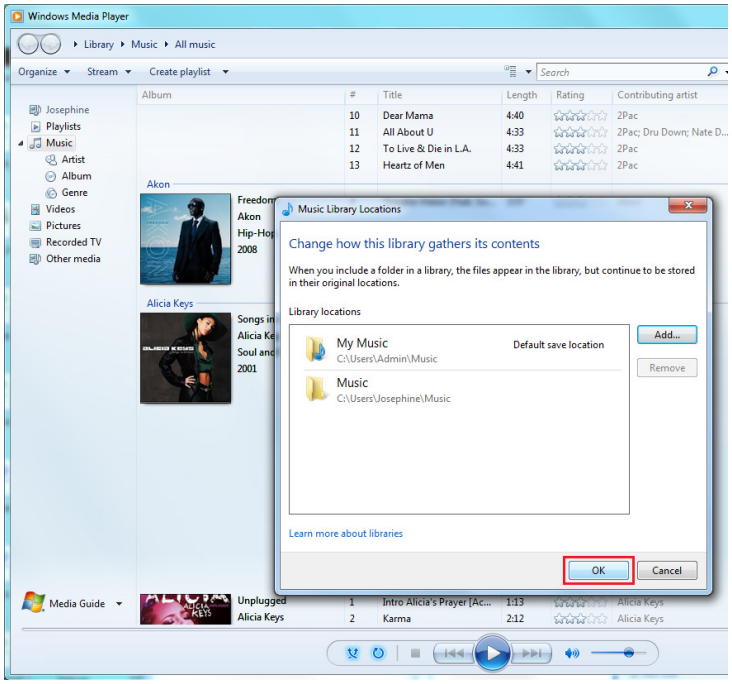
Click Add to add music folder(s) to your library.



Choose the location of your music.



Click OK to finish.



The music in the folder you've added will be included in the Windows Media Player for streaming later on.

3.2 Stream your Music

You can choose to control and stream music from your phone or PC and use your phone or PC as a remote control, all the instructions are illustrated in **3.2 A, 3.2 B and 3.2 C**.

3.2 A Stream and control your music from your phone

1. Install your preferred streaming app* (with digital media server function) on your iPhone or Android-based phone.

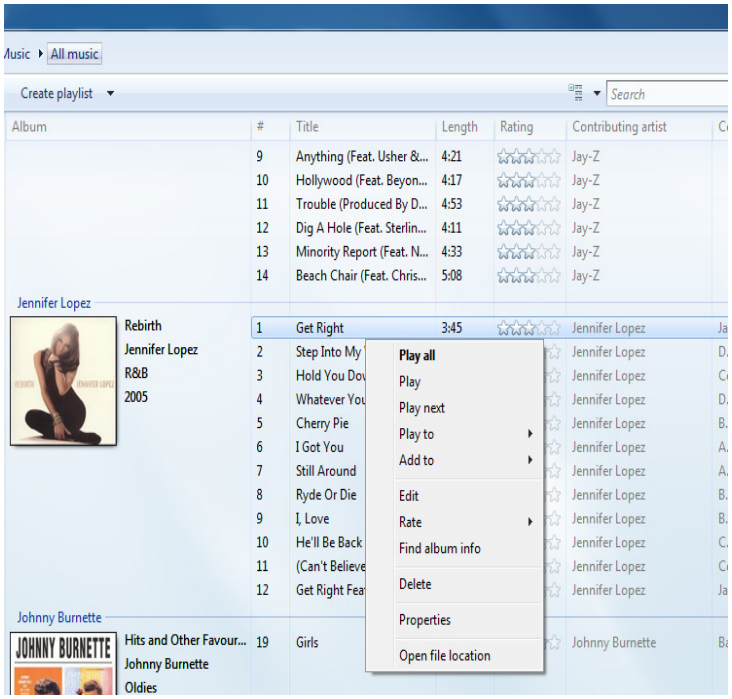
   * Recommended Apps:

Android	
	Name: BubbleUPnP Price: free
	Name: 2Player Price: free
	Name: Skifta Price: free
iOS	
	Name: PlugPlayer Price: USD 4.99

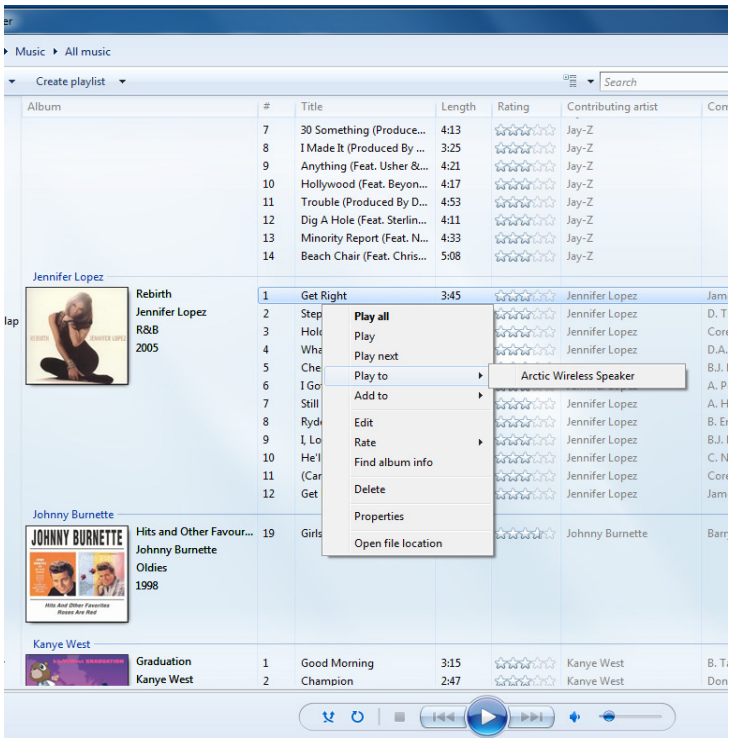
2. Connect your phone to the same wireless network as your Audio Relay.
3. Browse the music you have on your phone using the app and stream the song(s) to the designated Audio Relay connected to your Hi-Fi system or active speakers.

3.2 B Stream and control your music from your PC

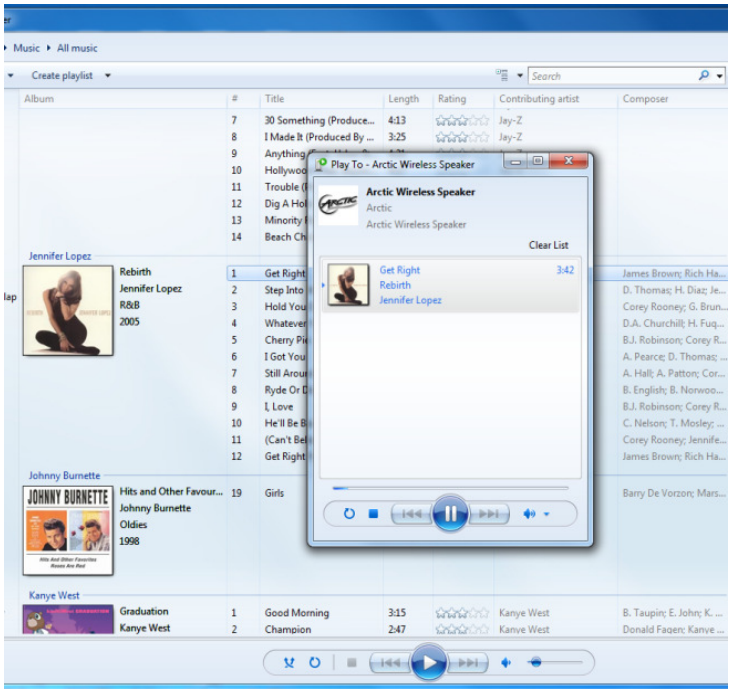
1. Right click on the track, the album or playlist in Windows Media Player or Windows Explorer.



2. Select “Play to” and choose where you want to stream according to the name of your Audio Relay (e.g., Arctic Wireless Speaker).



3. By repeating same step above, you add further songs, albums or playlists to the play queue.



3.2 C Stream music from your PC and use your phone as remote control

1. Install ARCTIC's "Remote AR" or your preferred streaming app* on your iPhone or Android-based phone.

   * Recommended Apps:

Android	
	Name: BubbleUPnP Price: free
	Name: 2Player Price: free
	Name: Skifta Price: free
iOS	
	Name: PlugPlayer Price: USD 4.99

2. Connect your phone to the same wireless network as your PC and Audio Relay.
3. Select your music library (prepared in Windows Media Player) and the Audio Relay you would like to play it on.
4. Use Remote AR to browse your music from your PC and stream it to the designated Audio Relay connected to your Hi-Fi system or active speakers.

   NOTE: For tutorial and troubleshooting for Remote AR, please visit http://www.remoteAR.arctic.ac

Chapter 4 Frequently Asked Questions

If you have any difficulties using the Audio Relay, please consult with the FAQ below for our recommended solutions. You may also contact our customer service center at http://www.arctic.ac/en/support.htm.

Q: Why do I need an Audio Relay for my hi-fi system?

A: The Audio Relay transforms your hi-fi system into a networked music player which streams all of your music from your computer wirelessly. You can control or share your music anywhere in your house using your PC or phone as a remote control. This allows everyone to access and play different music in different rooms at the same time, all with a unique shared library.

Q: Can I set up my Audio Relay without a network cable?

A: You can only set up your Audio Relay without a network cable by using WCN (Windows Connect Now) or WPS (refer to section 2.1.2).

Q: Why can I not find my Audio Relay in the Windows Explorer?

A: Make sure that your Audio Relay is switched on and is connected to the appropriate wired (LAN) or wireless (WLAN) network (refer to section 2.1.2).

Q: Why does my music suddenly stop playing?

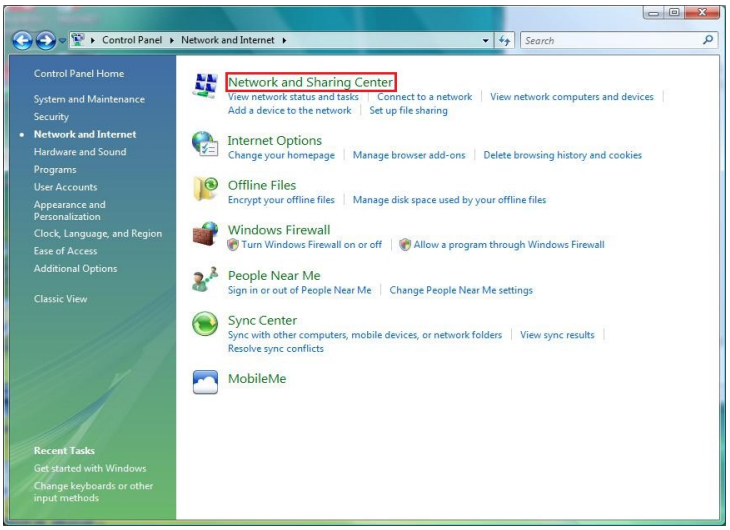
A: You may have lost the connection so you need to ensure that your computer and the Audio Relay are still connected onto the same network. Another reason for this is because another user may be using his/her Remote AR to stream songs to the same Audio Relay as you are at the same time. In the latter case, the Audio Relay will execute the most recent command. Therefore, you need to replay your music again.

Q: How do I stop the music when someone who streamed his or her music to an Audio Relay has left the network?

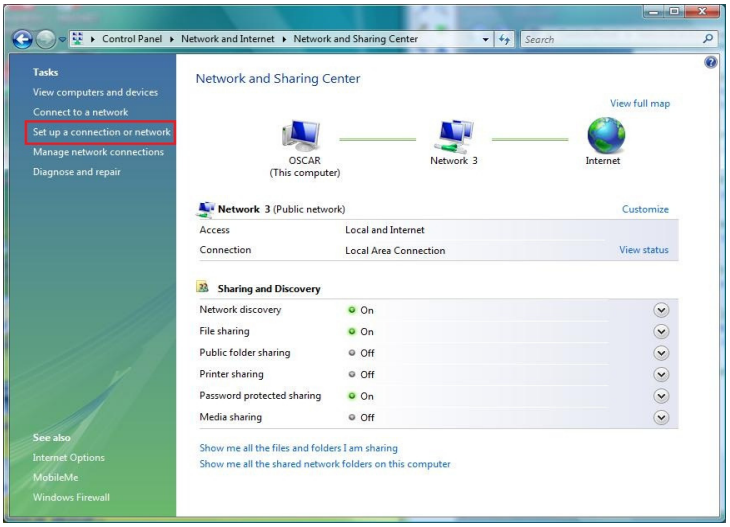
A: Use Remote AR on your smartphone/tablet to send a pause command to the respective Audio Relay or switch off the Audio Relay to stop streaming.

Q: How do I configure my wireless connection with Windows Connect Now (WCN) if I am using Windows Vista?

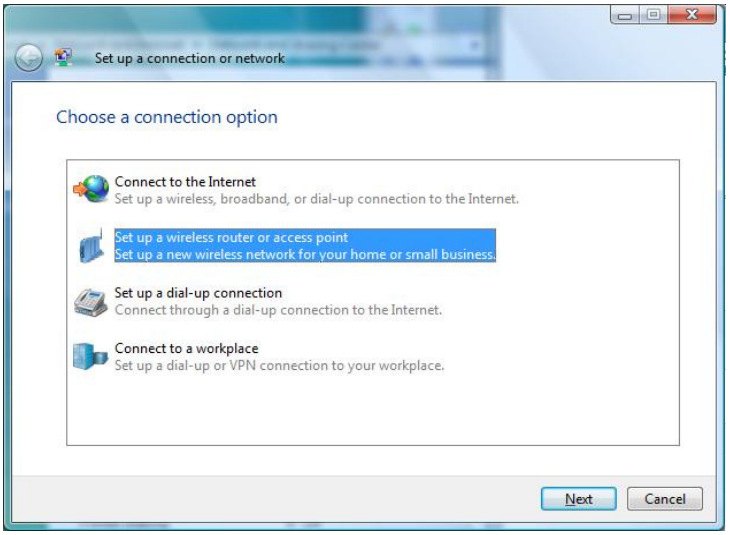
A: You need to insert a USB flash drive into your PC. Click on “Start Menu > Control Panel > Network and Internet > Network and Sharing Center”


Control Panel ▸ Network and Internet ▸
Search
Control Panel Home
System and Maintenance
Security
Network and Internet
Hardware and Sound
Programs
User Accounts
Appearance and Personalization
Clock, Language, and Region
Ease of Access
Additional Options
Classic View
Recent Tasks
Get started with Windows
Change keyboards or other input methods
Network and Sharing Center
View network status and tasks | Connect to a network | View network computers and devices
Add a device to the network | Set up file sharing
Internet Options
Change your homepage | Manage browser add-ons | Delete browsing history and cookies
Offline Files
Encrypt your offline files | Manage disk space used by your offline files
Windows Firewall
Turn Windows Firewall on or off | Allow a program through Windows Firewall
People Near Me
Sign in or out of People Near Me | Change People Near Me settings
Sync Center
Sync with other computers, mobile devices, or network folders | View sync results
Resolve sync conflicts
MobileMe

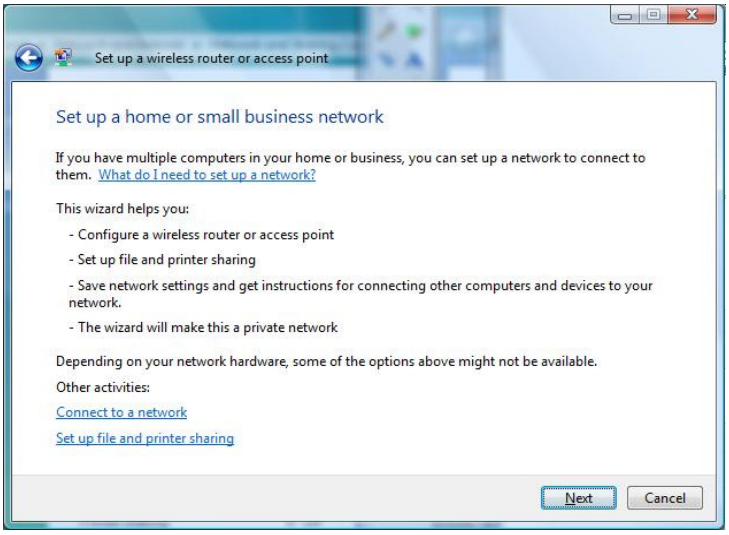
Select “Set up a connection or network”.

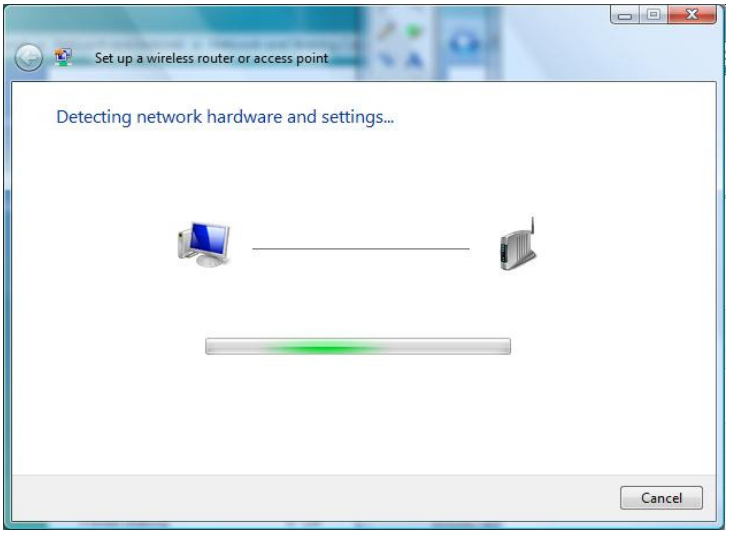


Select “Set up a wireless router or access point” and then click “Next”.

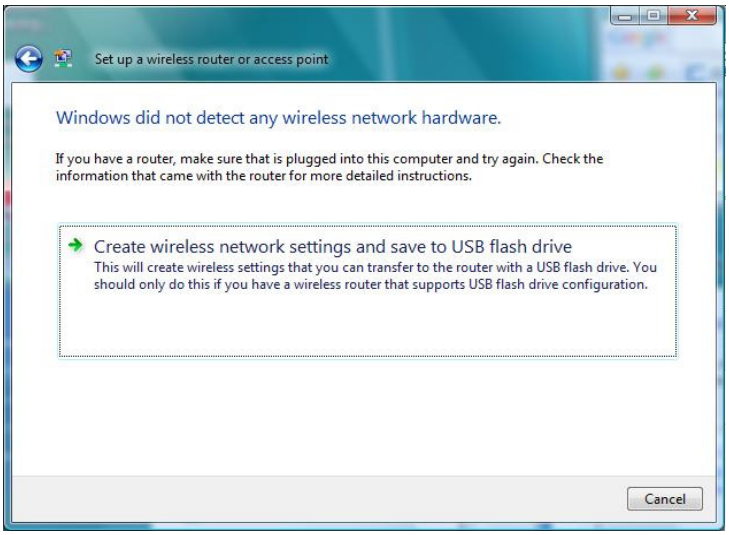

Set up a connection or network
Choose a connection option
Connect to the Internet
Set up a wireless, broadband, or dial-up connection to the Internet.
Set up a wireless router or access point
Set up a new wireless network for your home or small business.
Set up a dial-up connection
Connect through a dial-up connection to the Internet.
Connect to a workplace
Set up a dial-up or VPN connection to your workplace.
Next
Cancel

Click “Next” to set up your home or small business network.

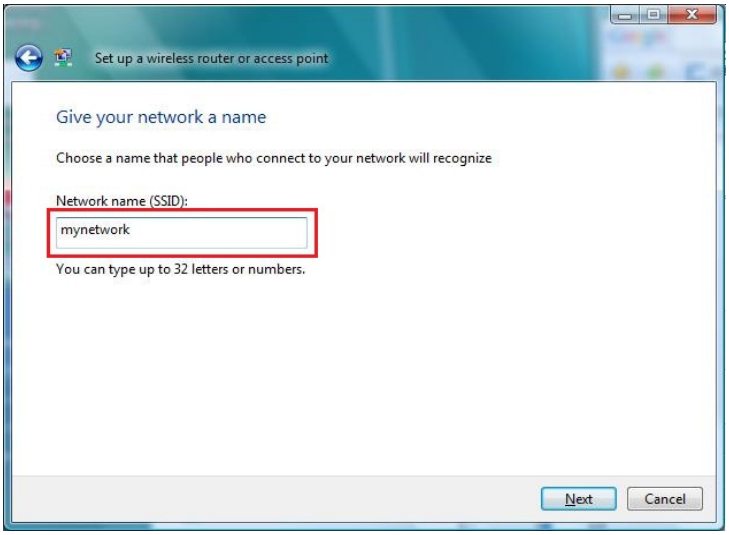

Set up a wireless router or access point
Set up a home or small business network
If you have multiple computers in your home or business, you can set up a network to connect to them. What do I need to set up a network?
This wizard helps you:
- Configure a wireless router or access point
- Set up file and printer sharing
- Save network settings and get instructions for connecting other computers and devices to your network.
- The wizard will make this a private network
Depending on your network hardware, some of the options above might not be available.
Other activities:
Connect to a network
Set up file and printer sharing
Next
Cancel



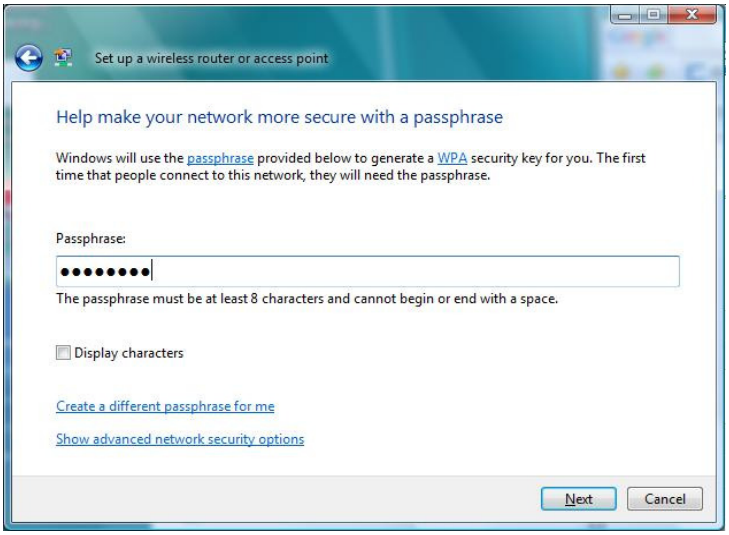
Select “Create wireless network settings and save to USB flash drive”.


Set up a wireless router or access point
Windows did not detect any wireless network hardware.
If you have a router, make sure that is plugged into this computer and try again. Check the information that came with the router for more detailed instructions.
Create wireless network settings and save to USB flash drive
This will create wireless settings that you can transfer to the router with a USB flash drive. You should only do this if you have a wireless router that supports USB flash drive configuration.
Cancel

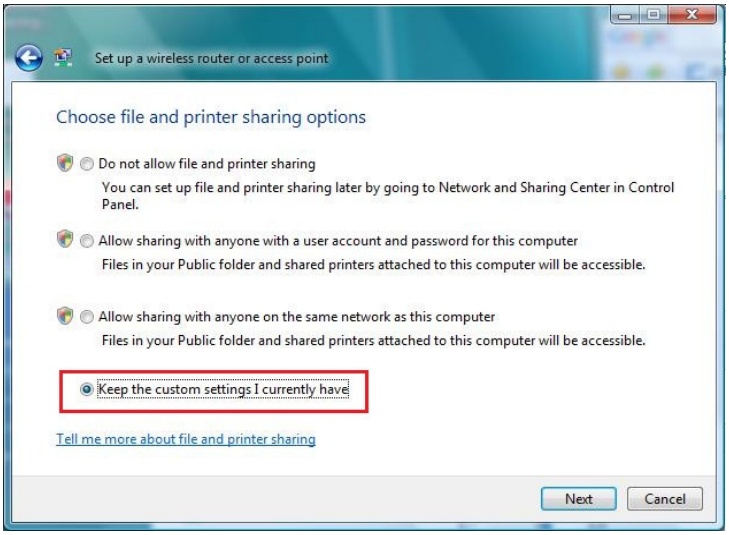
Type the exact name of the wireless network you want to connect and then click “Next”.


Set up a wireless router or access point
Give your network a name
Choose a name that people who connect to your network will recognize
Network name (SSID):
mynetwork
You can type up to 32 letters or numbers.
Next
Cancel

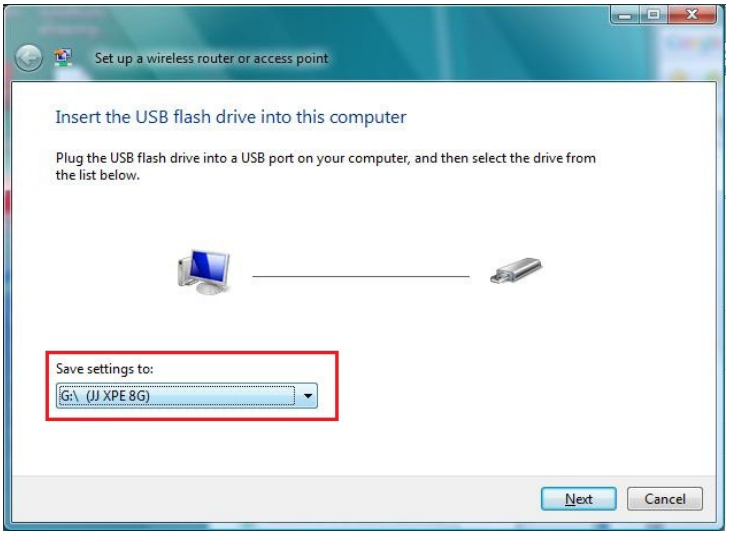
Type the passphrase or password of your wireless network and then click “Next”.

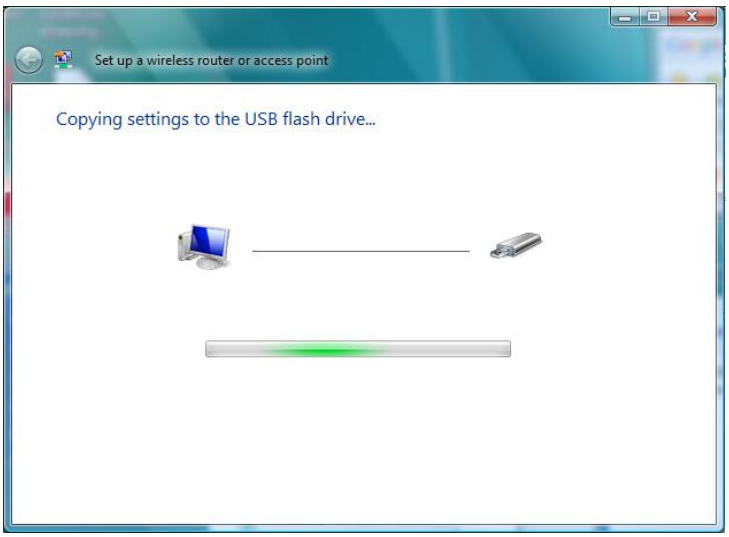

Set up a wireless router or access point
Help make your network more secure with a passphrase
Windows will use the passphrase provided below to generate a WPA security key for you. The first time that people connect to this network, they will need the passphrase.
Passphrase:
The passphrase must be at least 8 characters and cannot begin or end with a space.
Display characters
Create a different passphrase for me
Show advanced network security options
Next
Cancel

Select “Keep the custom settings I currently have” and click “Next”.

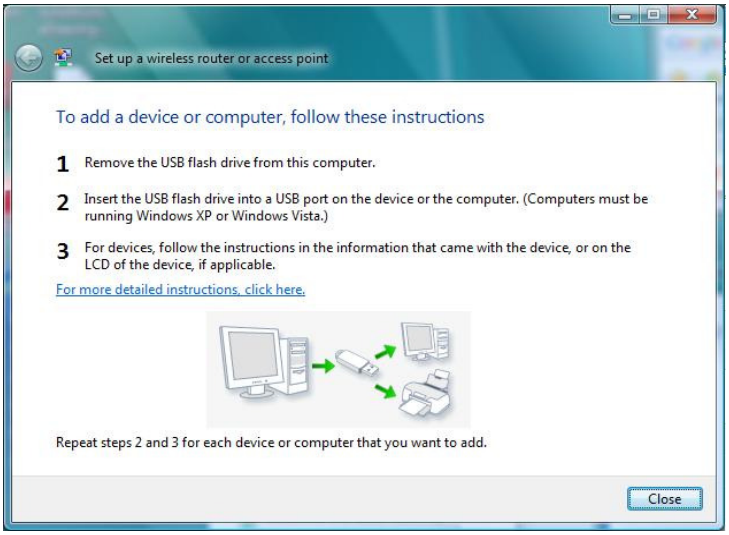

Set up a wireless router or access point
Choose file and printer sharing options
Do not allow file and printer sharing
You can set up file and printer sharing later by going to Network and Sharing Center in Control Panel.
Allow sharing with anyone with a user account and password for this computer
Files in your Public folder and shared printers attached to this computer will be accessible.
Allow sharing with anyone on the same network as this computer
Files in your Public folder and shared printers attached to this computer will be accessible.
Keep the custom settings I currently have
Tell me more about file and printer sharing
Next
Cancel

Check whether the location of your USB flash drive is correct and then click “Next”.


Set up a wireless router or access point
Insert the USB flash drive into this computer
Plug the USB flash drive into a USB port on your computer, and then select the drive from the list below.
Save settings to:
G:\ (JJ XPE 8G)
Next
Cancel

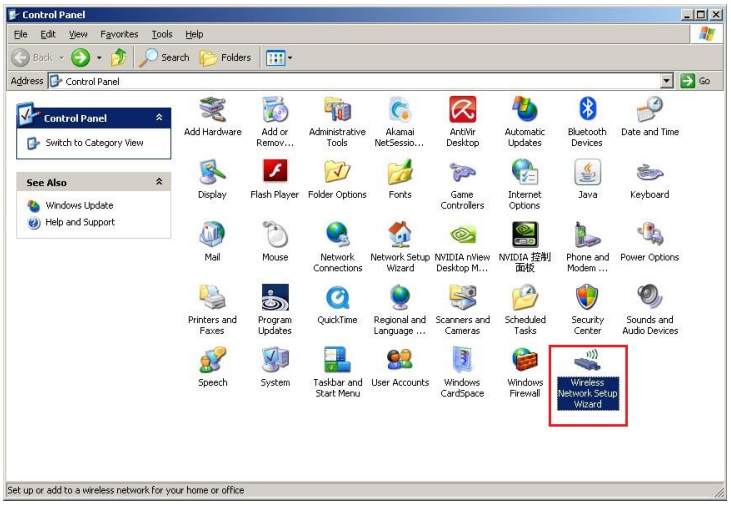


Follow the instructions step-by-step to finish configuring your wireless connection.


Set up a wireless router or access point
To add a device or computer, follow these instructions
1 Remove the USB flash drive from this computer.
2 Insert the USB flash drive into a USB port on the device or the computer. (Computers must be running Windows XP or Windows Vista.)
3 For devices, follow the instructions in the information that came with the device, or on the LCD of the device, if applicable.
For more detailed instructions, click here.
Repeat steps 2 and 3 for each device or computer that you want to add.
Close

Q: How do I configure wireless connection with Windows Connect Now (WCN) if I am using Windows XP?

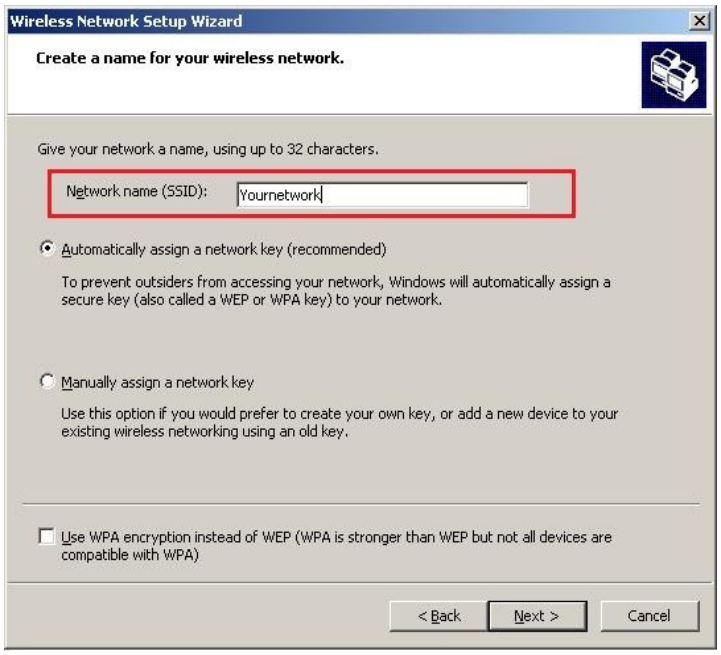
A: You need to insert a USB flash drive into your PC. Select “Start Menu > Control Panel > Wireless Network Setup Wizard”.



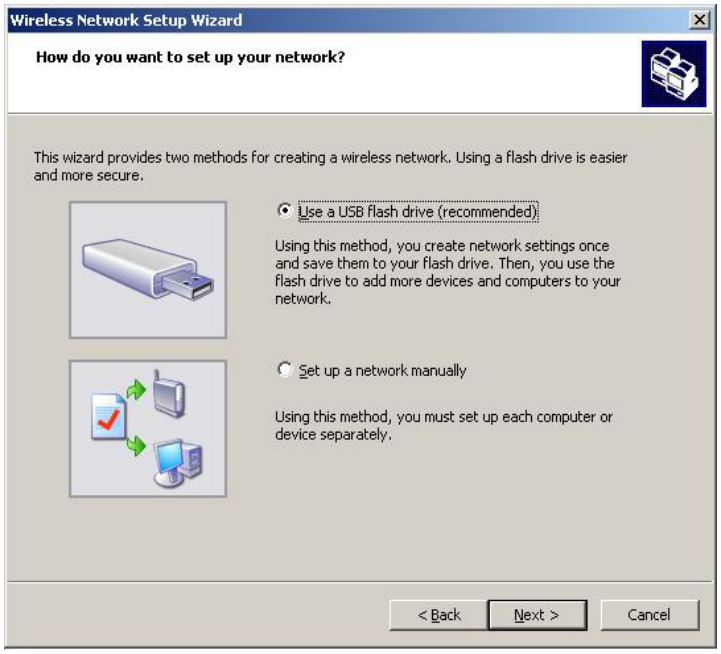
Click “Next” on the welcome page.

Wireless Network Setup Wizard
Welcome to the Wireless Network Setup Wizard
This wizard helps you set up a security-enabled wireless network in which all of your computers and devices connect through a wireless access point. (This is called a wireless infrastructure network)
To continue, click Next.
< Back
Next >
Cancel

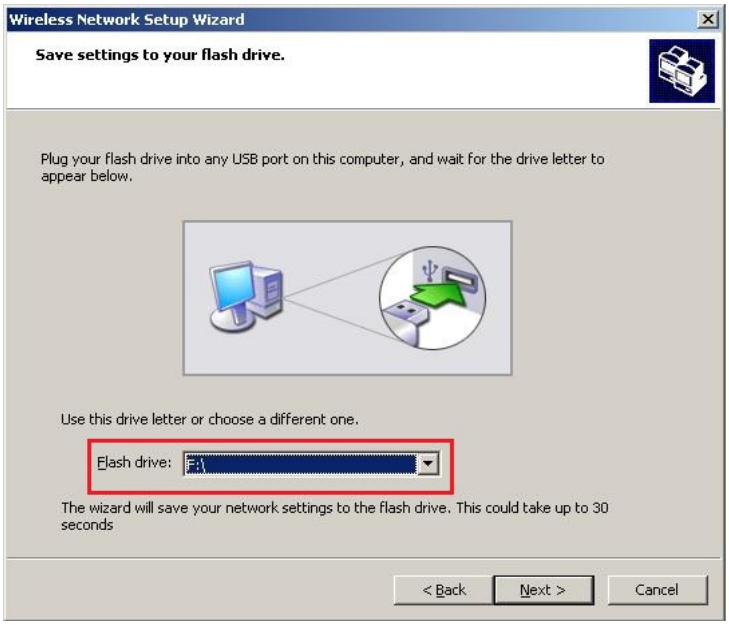
Enter the name of your wireless network and click “Next”.


Wireless Network Setup Wizard
Create a name for your wireless network.
Give your network a name, using up to 32 characters.
Network name (SSID):
Yournetwork
Automatically assign a network key (recommended)
To prevent outsiders from accessing your network, Windows will automatically assign a secure key (also called a WEP or WPA key) to your network.
Manually assign a network key
Use this option if you would prefer to create your own key, or add a new device to your existing wireless networking using an old key.
Use WPA encryption instead of WEP (WPA is stronger than WEP but not all devices are compatible with WPA)
< Back
Next >
Cancel

Select “Use a USB flash drive (recommended)” and click “Next”.


Wireless Network Setup Wizard
How do you want to set up your network?
This wizard provides two methods for creating a wireless network. Using a flash drive is easier and more secure.
Use a USB flash drive (recommended)
Using this method, you create network settings once and save them to your flash drive. Then, you use the flash drive to add more devices and computers to your network.
Set up a network manually
Using this method, you must set up each computer or device separately.
< Back
Next >
Cancel

Select the correct drive for your USB flash drive and then click “Next”.


Wireless Network Setup Wizard
Save settings to your flash drive.
Plug your flash drive into any USB port on this computer, and wait for the drive letter to appear below.
Use this drive letter or choose a different one.
Flash drive:
F:\
The wizard will save your network settings to the flash drive. This could take up to 30 seconds
< Back
Next >
Cancel

The Wireless Network Setup Wizard will save your settings to your USB flash drive. After that, it will guide you with step-by-step instructions on how to configure your wireless connection.

© 2012 ARCTIC (HK) Ltd. All Rights Reserved.
No part of this manual including the products described in it, may be reproduced, transmitted, stored in a retrieval system, or translated into any language in any form or by any means, except documentation kept by the purchaser for backup purposes, without the express written permission of ARCTIC (HK) Ltd. In no event shall ARCTIC its directors or employees be liable for any indirect damages, incidental or consequential damages arising from any defect or error in this manual or product.